

FOR USE IN STRUCTURAL CONCRETE: RETARDING ADMIXTURES
GUIDELINES FOR DOSAGE RATES WITH ANTICIPATED WORKING TIME LIMITS

1. Dosage is in mL/kg (fluid ounces per 100 lbs.) of cement and fly ash.
2. Check percent of air as retarding admixtures tend to increase air contents

		No Retarder		LC 500R	Plastocrete 161-MR	Plastiment 100	Pozzolith 100XR	Daratard 17	Eucon Retarder 100	Catexol 1000 R	FR-IL
Mix Temp. at Point of Discharge °C °F		Working Time Limit (hrs)	Dosage mL/kg (fl.oz.)	Working Time Limit (hrs)	Working Time Limit (hrs)	Working Time Limit (hrs)	Working Time Limit (hrs)	Working Time Limit (hrs)	Working Time Limit (hrs)	Working Time Limit (hrs)	Working Time Limit (hrs)
13	(55)	3.8	1.3 (2)	---	---	---	---	---	---	4.5	---
			2.0 (3)	---	---	---	---	---	9.6	5.5	---
			2.6 (4)	---	---	---	---	---	10.4	7.0	---
			3.3 (5)	---	---	---	---	---	12.3	---	---
18	(65)	3.1	2.0 (3)	9.1	4.9	5.5	9.0	---	8.2	4.8	---
			2.6 (4)	10.2	6.8	7.6	---	---	10.0	5.6	---
			3.3 (5)	11.4	10.9	12.1	---	---	11.7	6.8	---
			3.9 (6)	13.2	19.3	21.5	---	---	12.9	---	---
24	(75)	2.5	2.0 (3)	6.2	3.4	3.8	6.1	4.3	7.5	5.2	4.4
			2.6 (4)	7.9	4.5	5.0	7.8	6.6	9.9	5.7	4.6
			3.3 (5)	9.4	6.6	7.4	9.2	7.6	11.9	6.7	4.8
			3.9 (6)	---	10.5	11.7	---	---	12.5	---	5.7
			4.6 (7)	---	18.0	20.1	---	---	---	---	---
29	(85)	2.2	2.0 (3)	5.5	2.8	3.2	5.2	4.3	6.8	4.8	3.4
			2.6 (4)	6.1	3.5	3.9	6.7	5.2	9.6	5.4	3.6
			3.3 (5)	8.2	4.6	5.2	8.1	6.5	11.9	6.2	3.8
			3.9 (6)	---	6.5	7.3	---	---	11.9	---	4.0
			4.6 (7)	---	9.9	10.9	---	---	---	---	---
			5.2 (8)	---	---	---	---	---	---	---	---
35	(95)	1.9	2.0 (3)	4.7	2.1	2.4	4.5	3.9	6.8	4.5	---
			2.6 (4)	6.2	2.6	2.9	6.0	4.4	9.9	5.1	---
			3.3 (5)	7.6	3.3	3.7	7.4	5.7	11.8	5.7	---
			3.9 (6)	8.1	4.6	5.2	---	---	11.8	6.5	---
			4.6 (7)	---	7.0	7.9	---	---	---	---	---
			5.2 (8)	---	11.6	12.9	---	---	---	---	---

APPENDIX B
APPROVED BRANDS OF WATER REDUCING AND RETARDING ADMIXTURES

FOR USE IN CONCRETE PAVEMENTS:

NOTE: Mixed-to-placed time period may be extended as per Iowa DOT Standard Specifications Section 2301.13.D.

<u>Brand Name</u>	<u>Producer/Distributor</u>	<u>Recommended Minimum Dosage</u>	
		mL/kg cementitious materials	fl. oz./100 lb. cementitious materials
Catexol 800 R	AXIM Concrete Technologies	2.0	3
Catexol 1000R	AXIM Concrete Technologies	2.0	3
Daratard 17	W.R. Grace & Company	2.0	3
Eucon Retarder 100	Euclid Chemical Company Distributed by Brett Admixtures	1.3	2
FR-IL	International Construction Materials	3.3	5
LC-500R	RussTech	2.0	3
Plastiment 100	Sika Corporation Distributed by Contractors Steel Corporation	2.0	3
Plastocrete 161 M R	Sika Corporation	2.0	3
Pozzolith 100 X R	Master Builders Company	2.0	3
Pozzolith 200N	Master Builders	2.0	3
Polychem R	General Resource Technology	2.0	3
Standard Delayed Set	Fritz-Pak Corporation	2.6	4*
WRDA with Hycol	W.R. Grace & Company	2.0	3

*Dry powdered admixture, pre-packaged in water-soluble bag.